



Deviceless Remote Patient Monitoring in a Robust Virtual Care Strategy

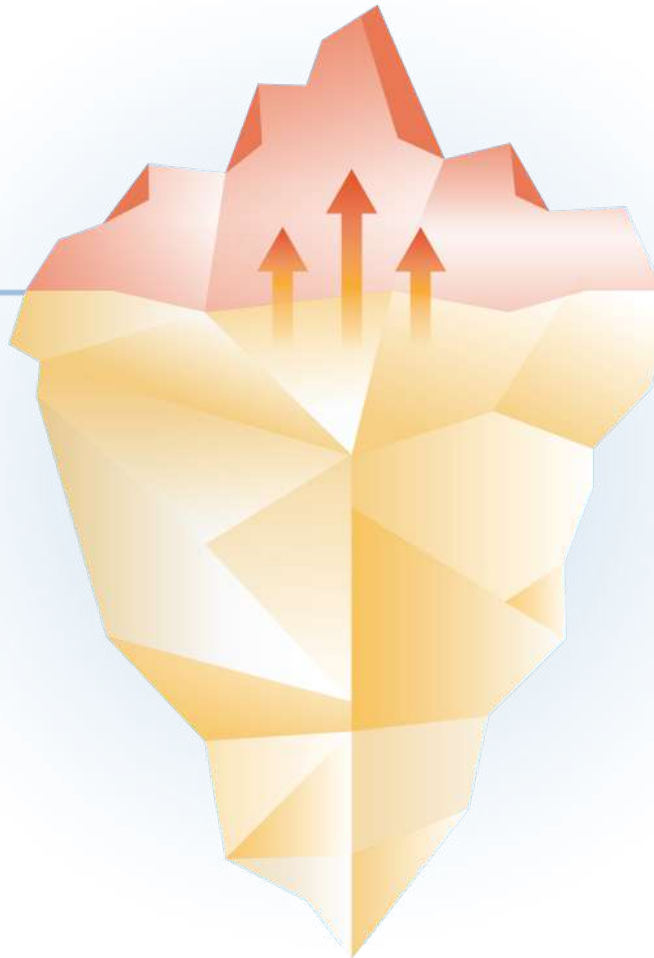
**Why the Right RPM Strategy Can Be Scalable...
Without Sacrificing Clinical Actionability and ROI**

Today's Agenda

- Examine industry leaders' models for the Virtual Care landscape
- Define a new category of Remote Patient Monitoring: *Deviceless Remote Patient Monitoring*
- Review Large Provider & Payvider Case Studies
 - Use-cases including Chronic *and Behavioral* Health
 - Engagement
 - Clinical Outcomes & Financial Returns
 - Patient Satisfaction

True Population Health Has Never Been More Vital

Each year, 1 in 5 of **rising-risk** patients become expensive, **high-risk** patients



High-Risk:
5% of
population

Rising-Risk:
20% of
population

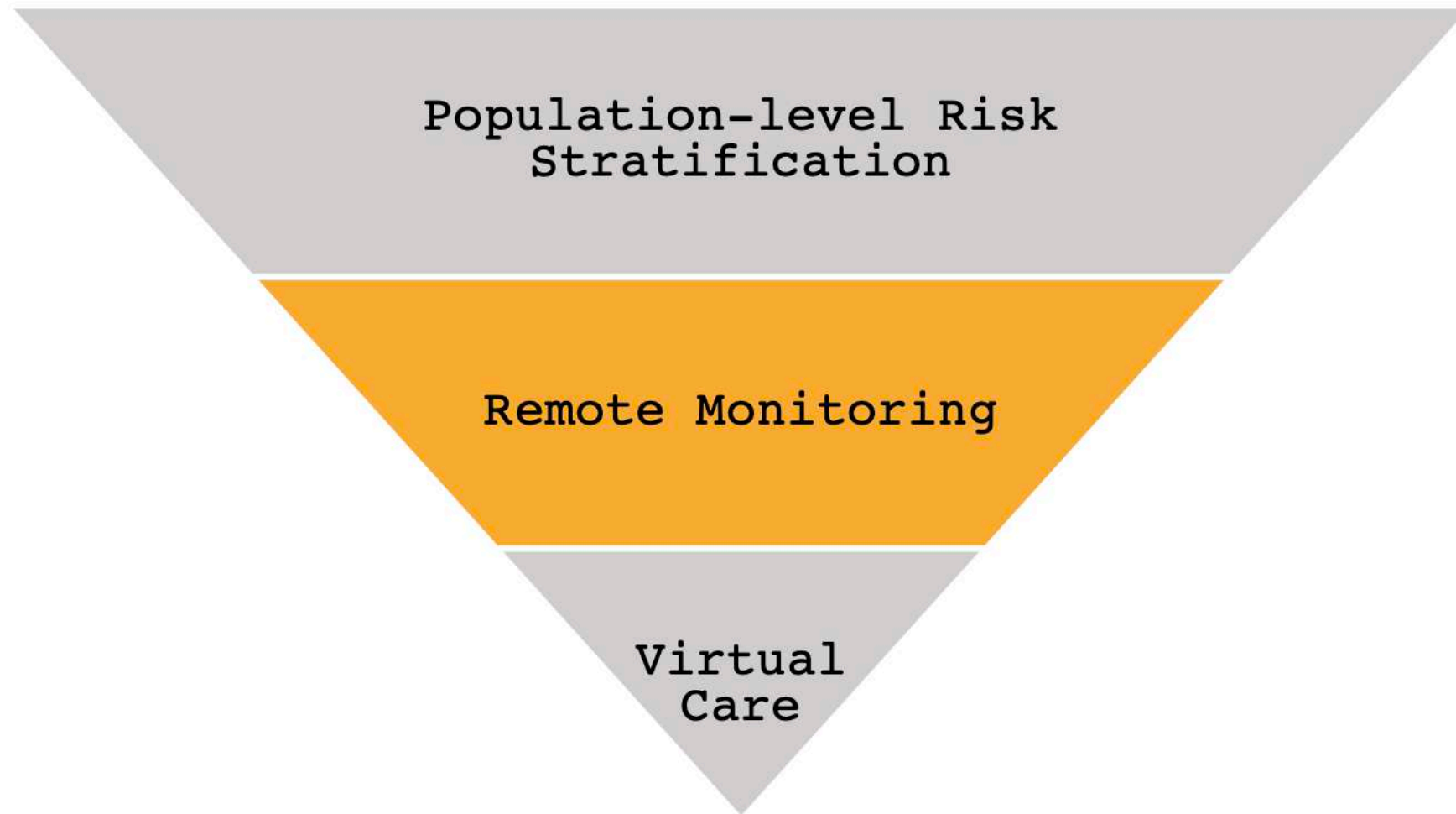


The NEW ENGLAND
JOURNAL of MEDICINE

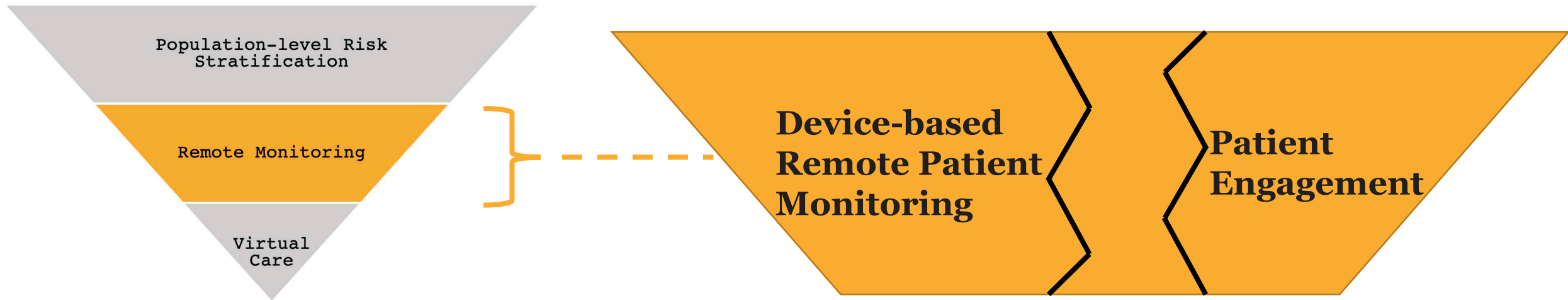
*“Our findings may also reflect fundamental challenges with the strategy of targeting superutilizers: **many [members] whose medical costs are high today will not be as high in the future.**” – Hotspotting Study*

(A. Finkelstein et al., 2020)

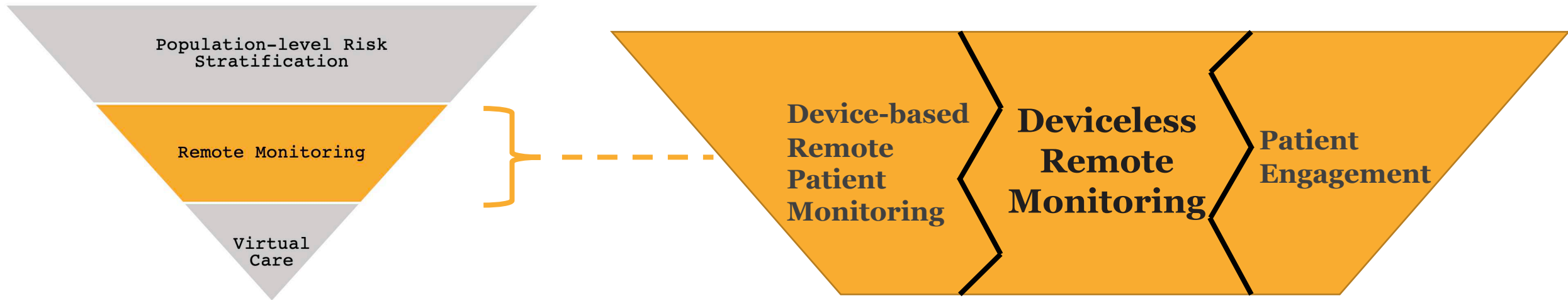
Where Does Remote Monitoring Fit?



And What *Is* Remote Monitoring?

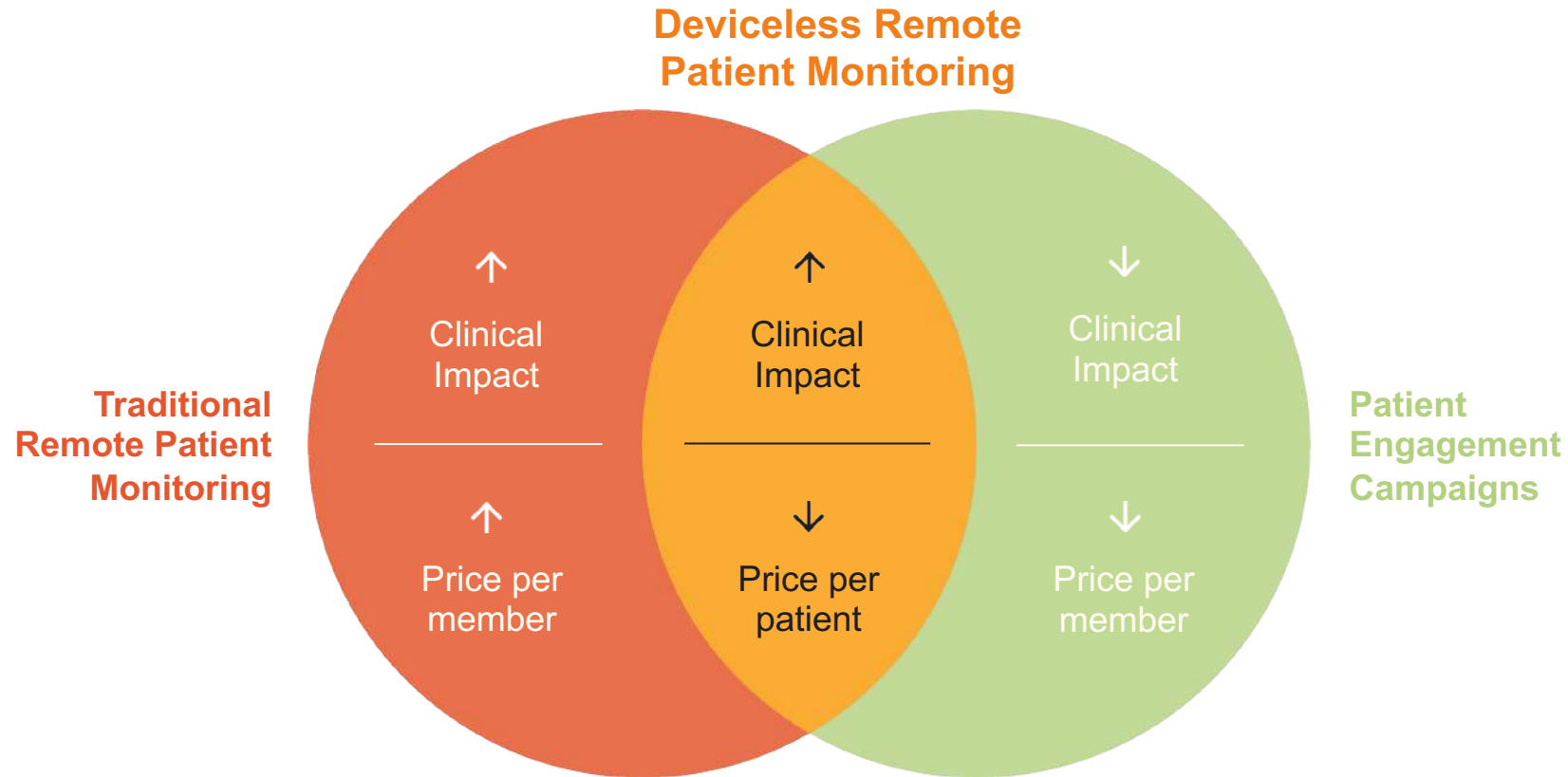


Where Does Remote Monitoring Fit?



Deviceless Remote Monitoring

Evidence-Based Quality. Sustainable Price. Higher ROI.



High Risk
0.5 – 5 %



Rising Risk
20%



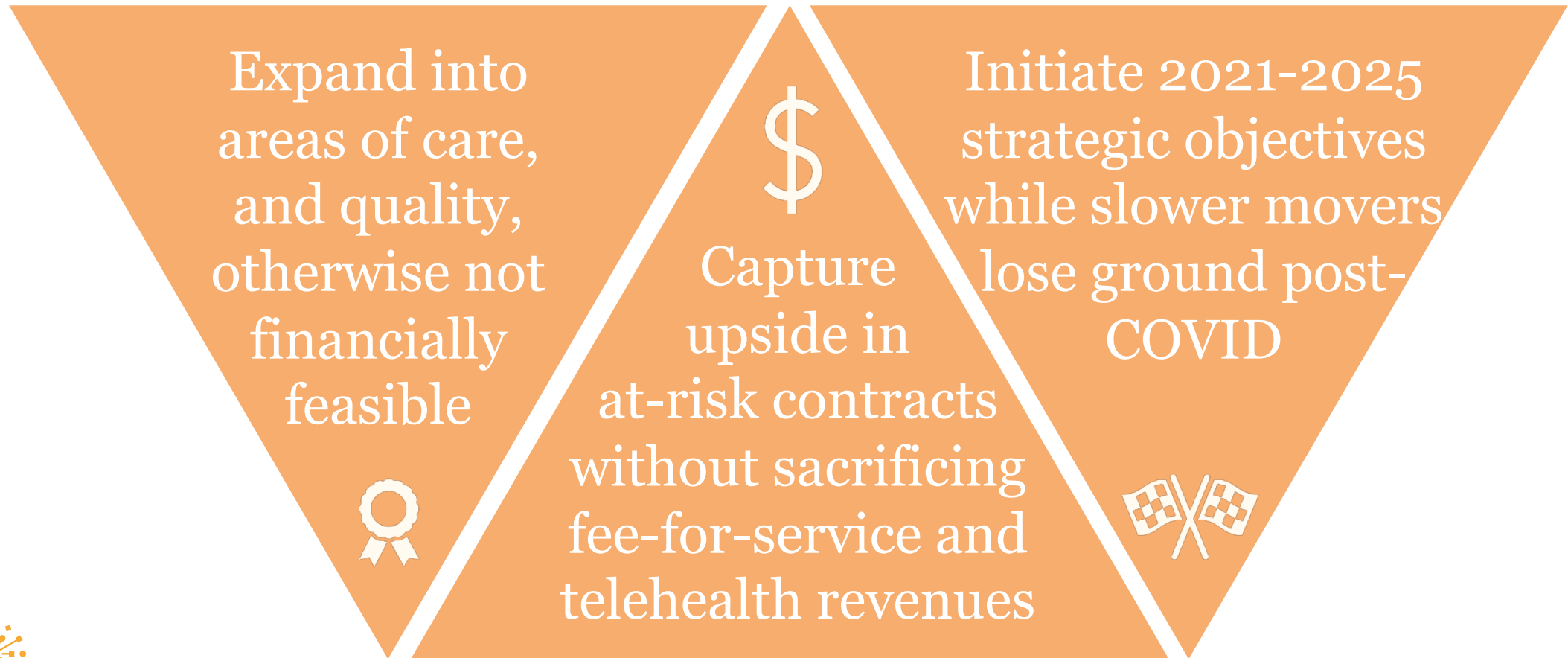
Low Risk
75%



Relevant Patient
Population

Financial
Opportunity

Why Deviceless RPM? Why *Now*?



Deviceless Remote Monitoring

Accessible, Scalable, Clinically Actionable

CareSignal works for
any patient

Via **smartphone**, **pay-as-you-go**
phone, **landline**, or **concerned**
caregiver's phone

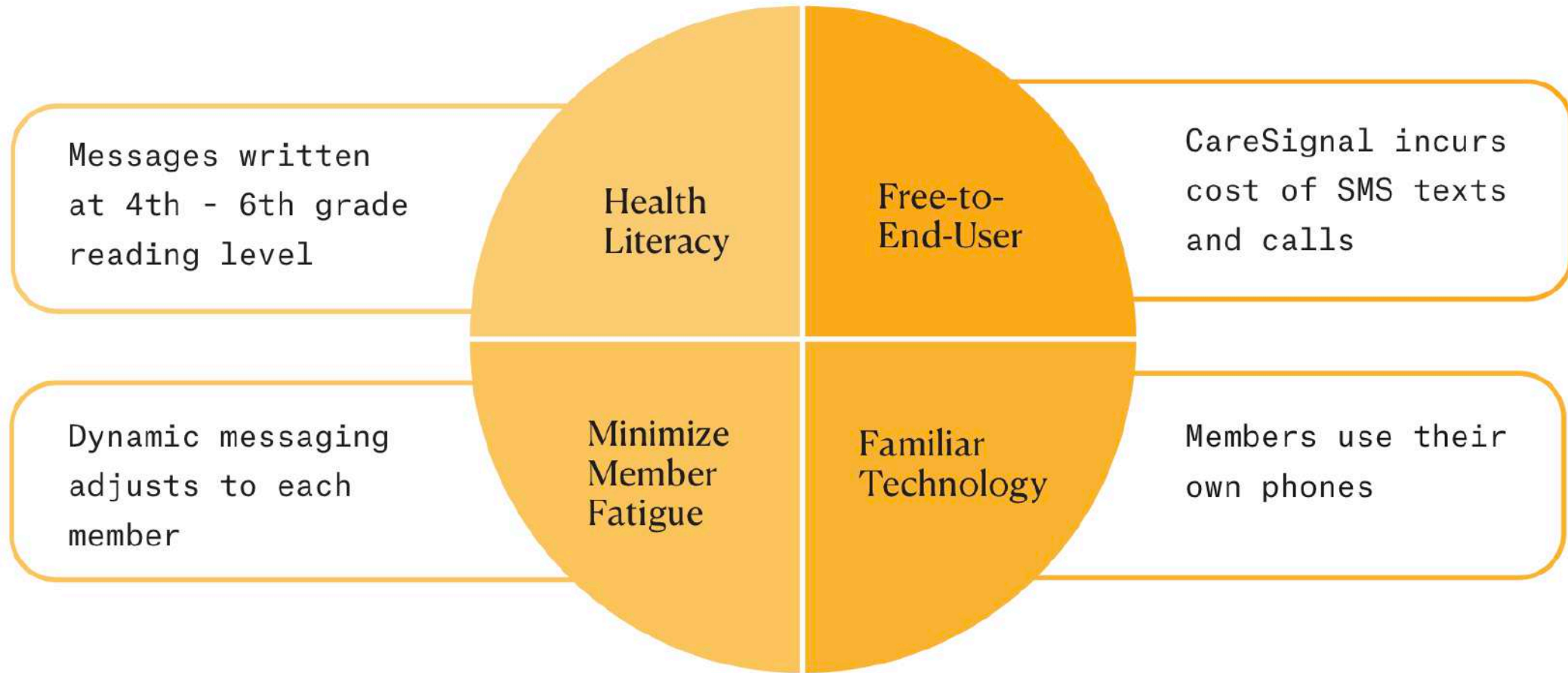
10+

Publications in peer-
reviewed journals



Accessibility Is King

Technology, Process, & Patient Experience

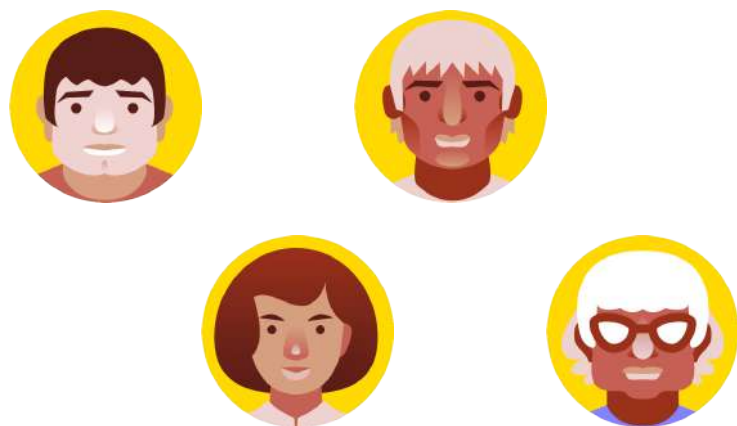


Real-time Identification, Long-term Engagement

Scalable, cost-effective, top-of-license care management

Stratification before CareSignal:

Ex: all patients with CHF or COPD ICD-10

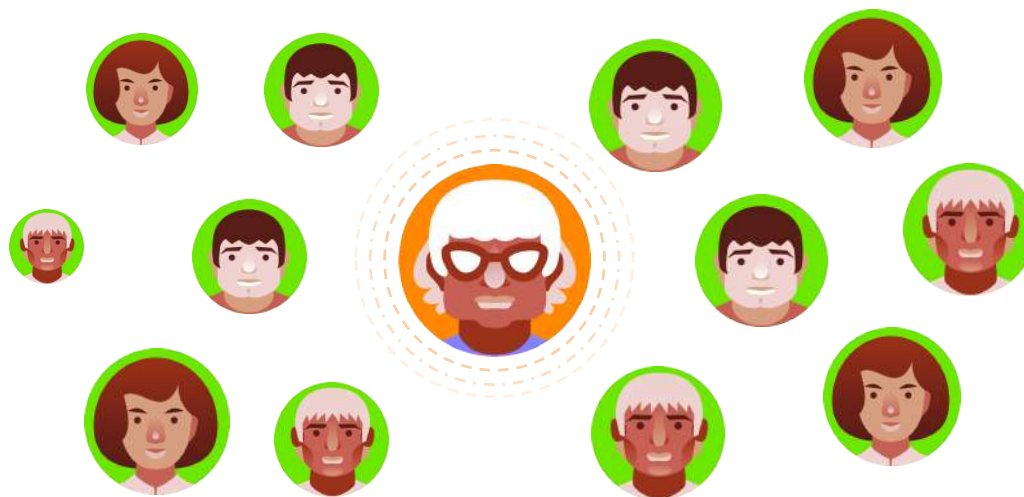


Retrospective data groups patients into broad risk pools requiring **manual outreach** to triage



Stratification after CareSignal:

Ex: worsening dyspnea or pedal edema



Real-time patient-generated “**Rare Data**”, biometric/symptomatic data that provides **actionable** clinical information...**Triggered Alerts** for targeted intervention

CareSignal Operational Excellence

Proven Enrollment, Engagement, Outcomes, and Scale



62% decrease
in hospitalizations
for patients with COPD



28% drop in PHQ-9
for patients with
depression



1.15% drop in HbA1c
over 4 months



>2.1x increase in
follow-up appointment
adherence



50% improvement in
blood pressure
control over 12 weeks



58% decrease in CHF
ED visits

10 Publications

in Peer-Reviewed Medical Journals

NEJM
Catalyst

nature
SCIENTIFIC
REPORTS

SAGE journals
The award-winning
electronic journals platform

JMIR

JMIR

Telemedicine
and e-Health
Mary Ann Liebert, Inc. publishers

CareSignal Program Portfolio

30+ Condition-Specific Programs Available

Chronic Condition Management

- Diabetes
- Hypertension
- Heart Failure
- COPD
- Asthma
- Dialysis

Behavioral Health

- Depression
- Anxiety
- Substance Use
- Opioid Management
- Mood
- Caregiver support
- Social Determinants of Health

Maternal Health

- Breastfeeding
- Postpartum depression

Discharge Support

- Appointment Reminder
- Post Discharge
- Referral
- Surgery
- Pneumonia
- Vital Signs

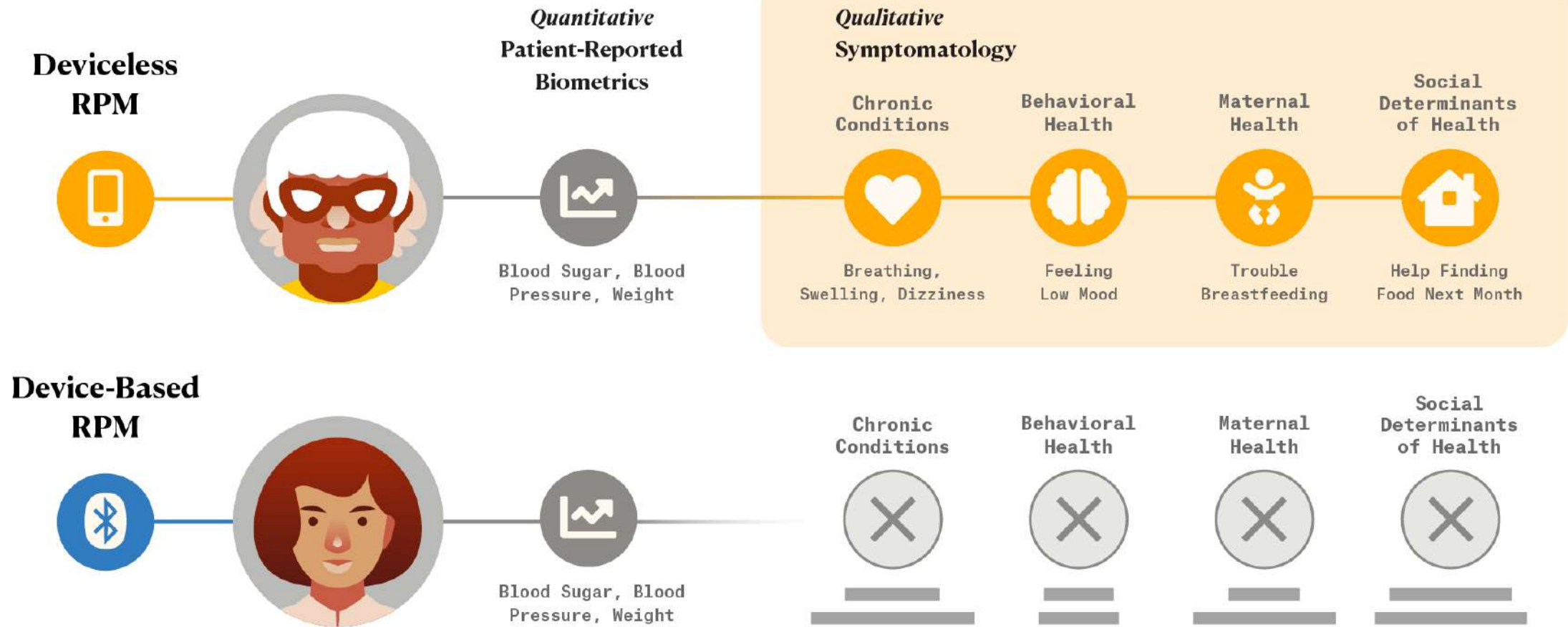
Screening Reminders

- Colorectal cancer
- Breast cancer
- Cervical cancer
- Diabetes ophthalmology
- Chlamydia screening
- Lead screening

Complementary Support

- COVID Suite
- Influenza
- Fall Risk
- Wellness
- Medication Tracking
- Medication Adherence
- Medication Companion

Deviceless Remote Patient Monitoring Scales Clinically Actionable Engagement Far Beyond Chronic Conditions



Patient-reported outcomes are highly accurate, and the increased patient involvement promotes accountability across far more conditions

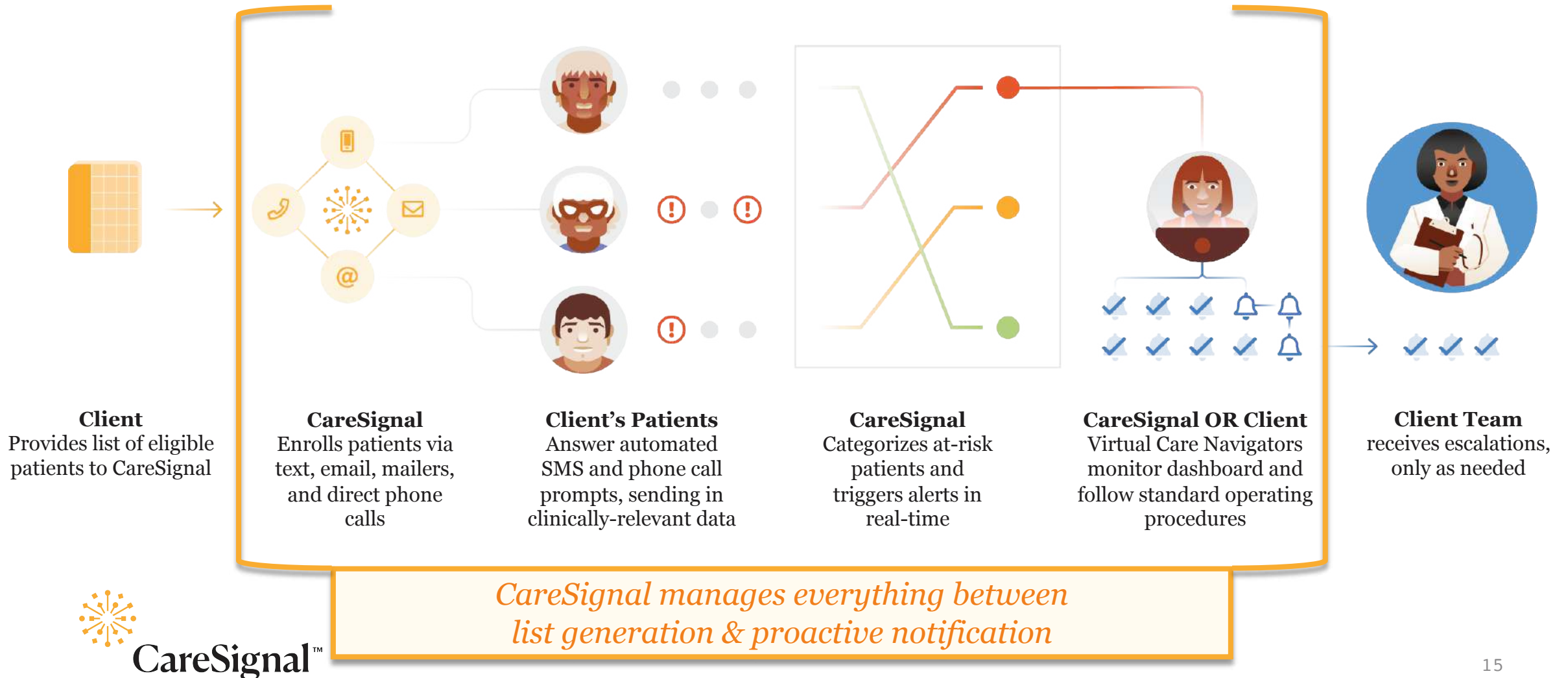
¹<https://onlinelibrary.wiley.com/doi/abs/10.1111/nmo.12466>

²<https://www.sciencedirect.com/science/article/abs/pii/S1072751515016178>

³<https://link.springer.com/article/10.1007/s40271-014-0090-z>

CareSignal Member Journey

End-to-End Solution to Simplify Proactive Care



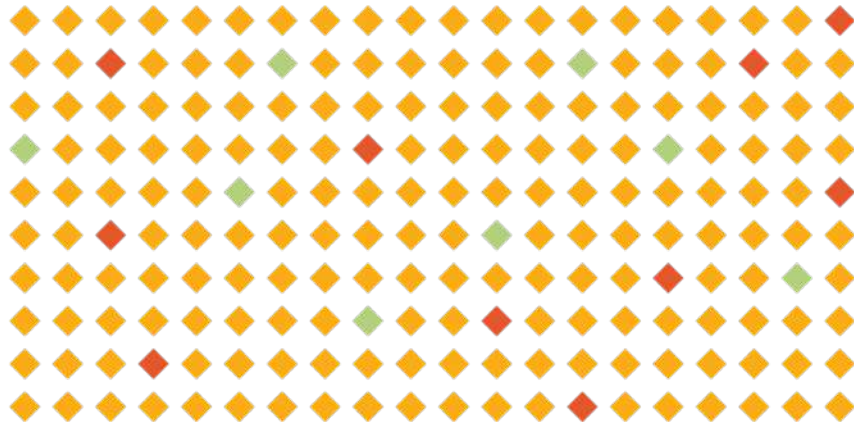
Automated, engaging, and scalable programs are required to reach the tipping point for proactive care

Manual outbound outreach limits case management impact and efficiency

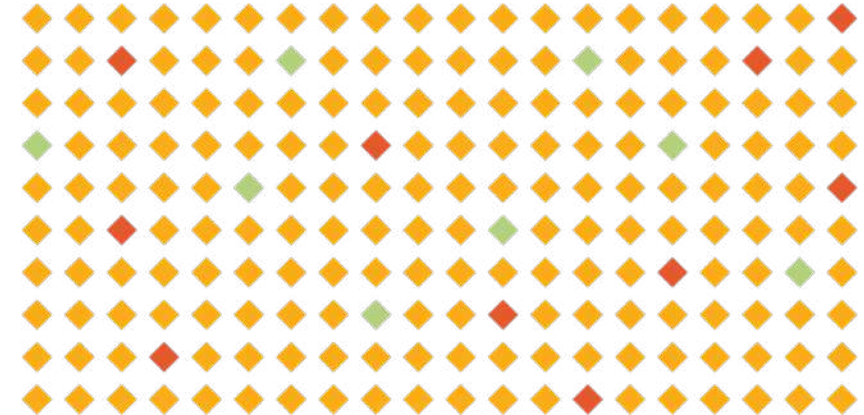


Automated inbound insights allow case management to focus on the right members

15 Case Managers : 1,500 Patients



1 Case Manager : 1,500 Patients



CareSignal.AI

Predict & Proactively Prevent Engagement Dropoff

>50% 12-month retention

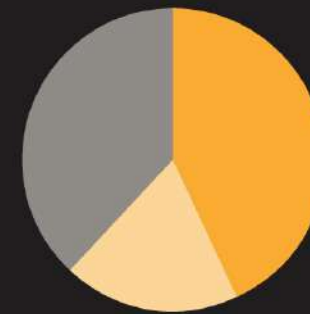
7,280,273+

Patient/Member days
of data and metadata

16.62+

Lifetimes of care
manager interactions

AI-informed, preventative outreach delivers
dramatically better engagement



57% of Patients Remain Engaged
After AI-Informed Outreach

■ 38% Improved Engagement
■ 19% Maintained Engagement
■ 43% Disengaged

Without CareSignal AI

1 in 2 patients
stay engaged with
CareSignal over
a 12-month period



With CareSignal AI

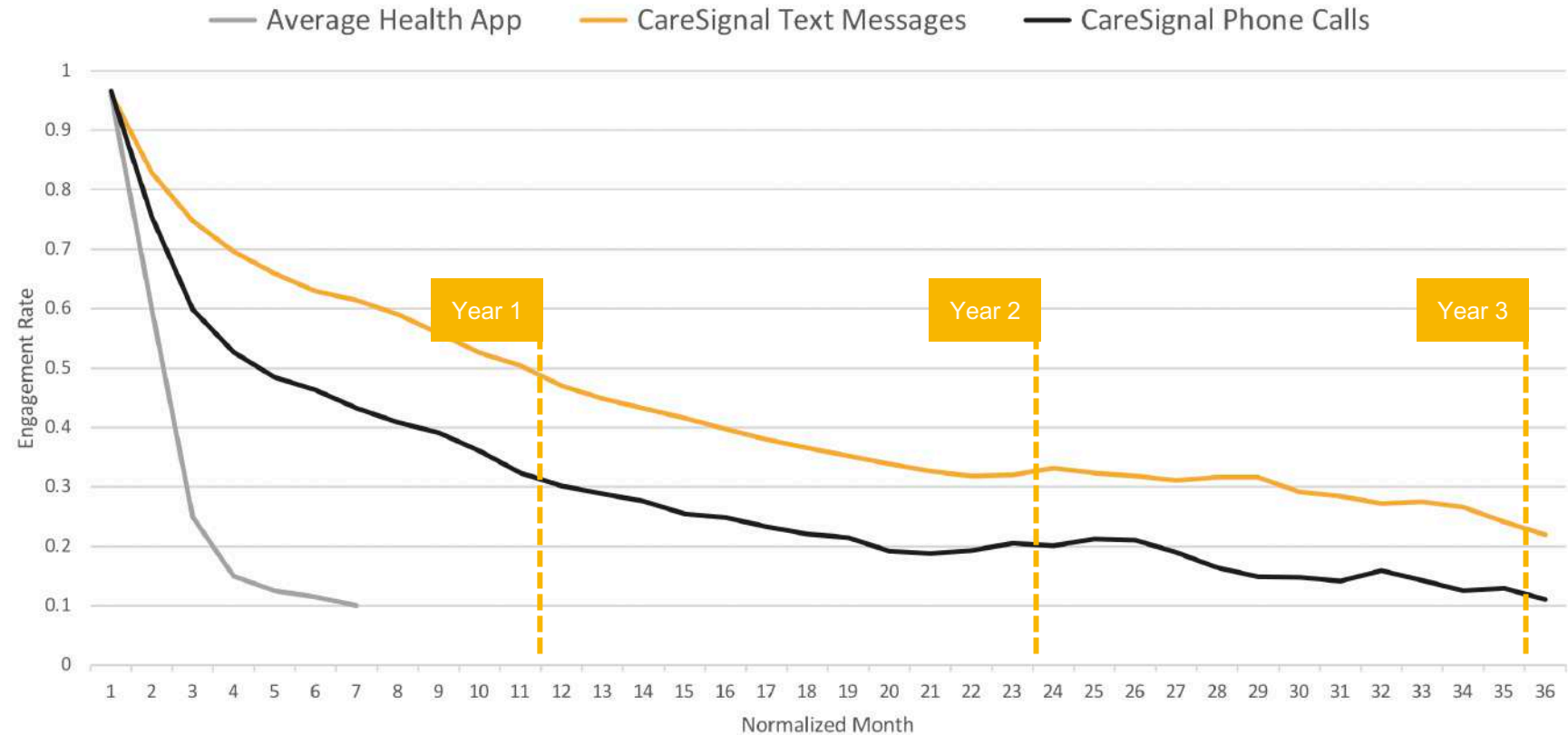
57% more patients
may remain engaged
over the same
12-month period



CareSignal Delivers Long-term Engagement

6x-12x Better Engagement & Retention Duration

Text Message vs. Phone Call Engagement Over Time



Patient
Engagement

1 in 2

Patients stay engaged
12 months or longer



Case Study



Traditional Care Manager, RN · 30 High-Risk Patients



Hub and Spoke, MA · 300 Rising-Risk Patients



CareSignal™



Advancing High Performance Health

“CareSignal has created a technology that is simple to implement and produces a quick and sustainable impact on patient care. CareSignal allows Mercy to expand our ability to support patients with chronic conditions using a technology-first approach that allows nurse care managers to intervene when patients most need help.

Without this technology, nurses spent considerable time reaching out to patients in non-value-added activities that limited their ability to respond to patients at the right time. Now with smart technology, we can systematically reach out and connect with more patients on a routine basis and utilize our nurses to intervene when patients are beginning to have worsening symptoms.

This leads to a better patient experience, more targeted care management intervention, improved medication adherence, reduction in avoidable emergency department visits, and improved care manager and provider satisfaction.”

— Mary Laubinger
Vice President, Population Health Navigation



Heart
Failure

POPULATION

Employees diagnosed with CHF and a history of CHF-related ED visits prior to starting the intervention

CLINICAL OUTCOME

59%

reduction in CHF ED visits

HIGH LONGITUDINAL PATIENT ENGAGEMENT

57%

of patients were engaged
at three months

33%

of patients were engaged
at six months

FINANCIAL OUTCOME

-\$848.20

per member per month



COPD

POPULATION

Employees diagnosed with COPD and a history of COPD-related ED visits prior to starting the intervention

CLINICAL OUTCOME

30%

reduction in COPD ED visits

HIGH LONGITUDINAL PATIENT ENGAGEMENT

54%

of patients were engaged
at three months

39%

of patients were engaged
at six months

FINANCIAL OUTCOME

-\$193.85

per member per month



Diabetes

POPULATION

Employees diagnosed with diabetes

CLINICAL OUTCOME

2.03%

average reduction in HbA1c¹

HIGH LONGITUDINAL PATIENT ENGAGEMENT²

89%

of patients were engaged
at three months

78%

of patients were engaged
at six months

FINANCIAL OUTCOME

-\$200.71

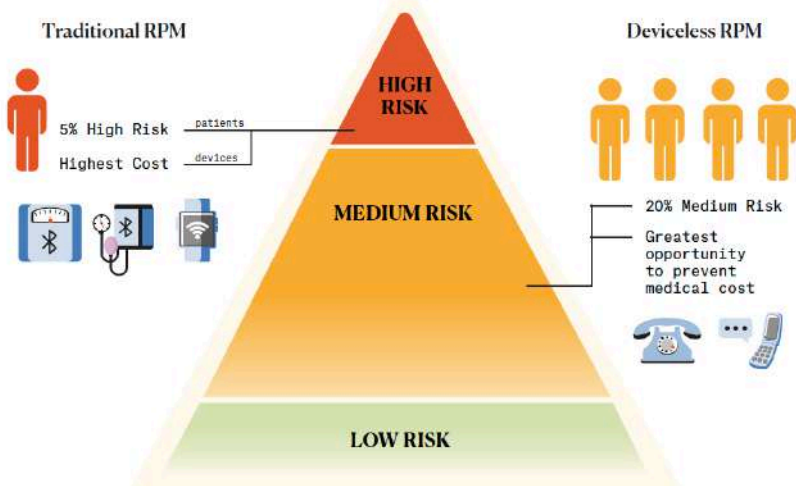
per member per month

Mercy presented outcomes at 2020 AMGA Conference

Large Medicare Advantage Physician Group (Fully Capitated)

Case Study

Deviceless Remote Patient Monitoring Scales to Rising-Risk Patients at a Fraction of the Cost of Device-Based RPM

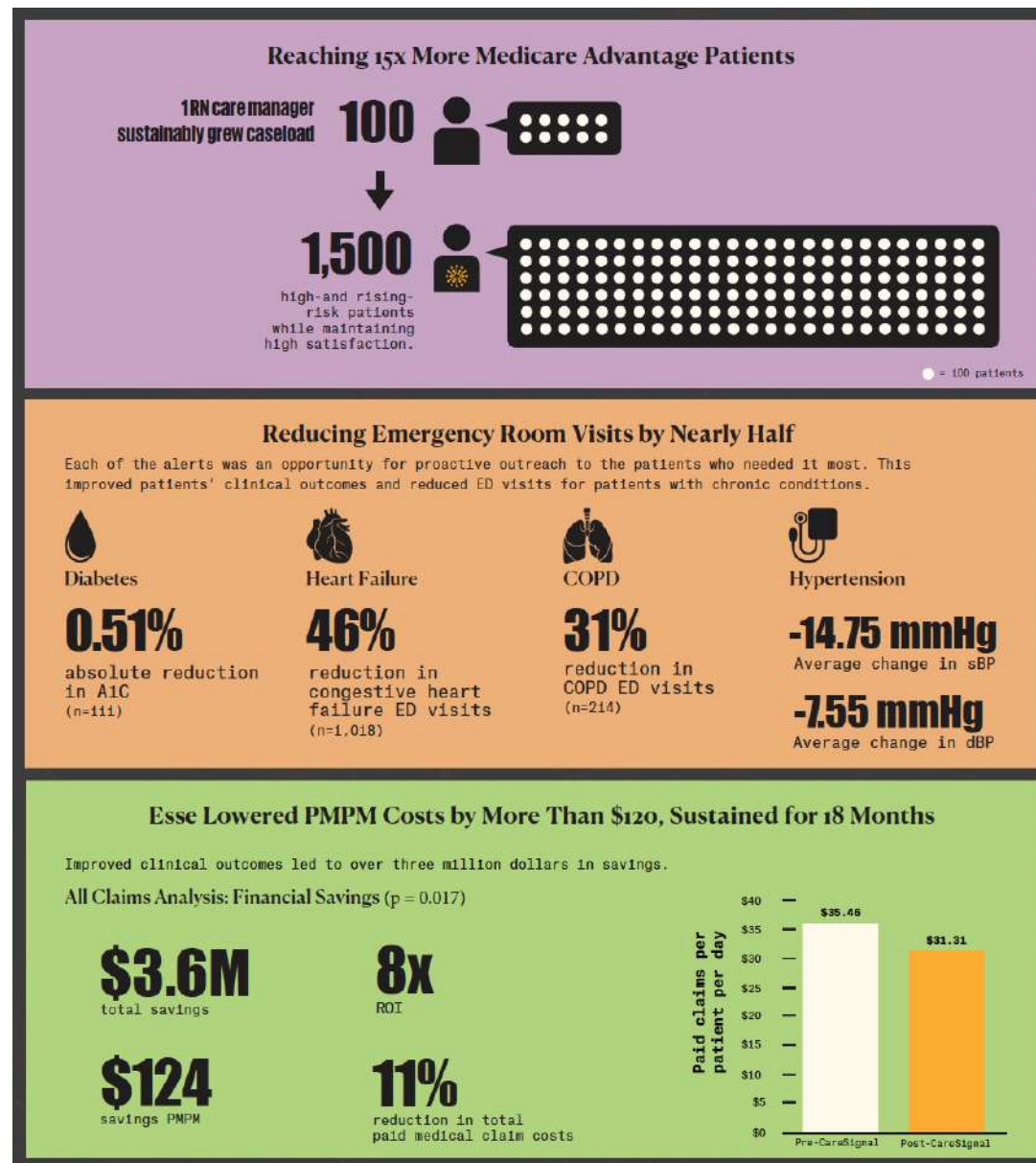


"Now we've been able to wrap our hands around a whole group of people who otherwise might not have gotten all those touches that they received with the platform. We've been able to scale the outreach dramatically without an increase in staff, and that's really important. High-risk care management is inherently a reactive model. By extending care management into the rising-risk patients, we are becoming more proactive. Now we can say, 'Hey, there might be a problem developing. Let's reach out to the patient instead of waiting until he goes to the ED.' It's helped us manage rising-risk patients who might not have perceived a need for a care management team before."

— Carla Beckerle
Vice President of Clinical Programs at Esse Health



CareSignal™



Presented outcomes at 2020 ATA & Abstract Published in Telemedicine and e-Health



STRIDE
COMMUNITY HEALTH CENTER
formerly known as MCPN

Case Study

Condition

Diabetes

Quality Metric

Reduce patient HbA1C levels to under 8%

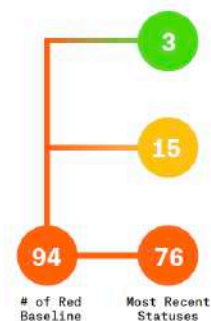
Patient Inclusion Criteria

HbA1C above 8%

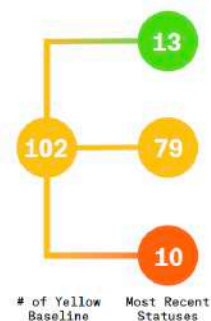
Hypertension

Reduce patient blood pressure scores to under 140/90

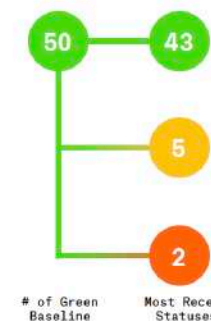
BP above 140/90



Of 94 high-risk diabetes patients, 19% of them improved.



Of 102 rising-risk diabetes patients, 77% of them maintained.



Of 50 low-risk diabetes patients, 86% of them maintained.

Patients with diabetes reported:

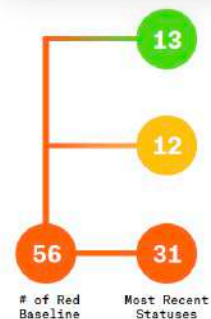
"This helps me to be more responsible in case I forget. I know you're going to send me a message, and it helps me to be prepared to answer."

"I have more control with my diabetes, and it helps me remember to take my blood sugar every day."

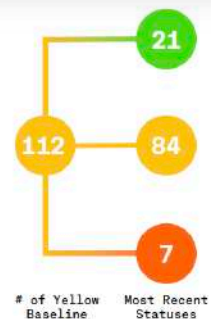
Patients with hypertension reported:

"It helps me to remember to take my medication. I haven't forgotten to take it since this service started."

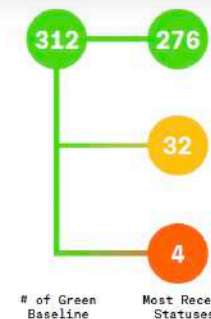
"It brings closeness between STRIDE and its patients."



Of 56 high-risk hypertension patients, 45% of them improved.



Of 112 rising-risk hypertension patients, 75% of them maintained.



Of 312 low-risk hypertension patients, 88% of them maintained.



CareSignal™

"CareSignal helps us engage hard-to-reach patients and see which patients are alerting, and sometimes, we find that they haven't been refilling their meds or haven't been to the clinic for over a year, and their blood pressure or blood sugar is out of control. CareSignal gives us way more visibility into our patient populations and allows us to reach out to patients and help."

- Stephanie Campbell, RN, director of nursing at STRIDE Community Health

Large Payer-Provider Joint Venture

Care Satisfaction · You are getting the best possible care from _____.

N = 128

Average = 7.76



1 - Strongly Disagree

Strongly Agree - 9

Improve Satisfaction & Outcomes Simultaneously

Improved Communication · These messages have improved your communication with _____.

N = 124

Average = 7.69



1 - Strongly Disagree

Strongly Agree - 9

Chronic Condition Programs



Diabetes

Monitors blood glucose levels and supply accessibility



Hypertension

Tracks blood pressure and hypo- and hypertensive symptomology



COPD

Tracks breathing to prevent worsening symptoms



Asthma

Monitors breathing with/without peak flow meter and tracks inhaler utilization



Heart Failure

Monitors heart health through tracking breathing, edema and weight



Dialysis

Monitors symptoms and tracks appointment/treatment adherence



Epilepsy

Tracks seizure frequency

Behavioral Health & Sub Use Programs



Depression

Tracks mood and depressive symptoms via PHQ-9.



Caregiver Support

Monitors risk of caregiver burnout using IDT questionnaire.



Substance Use

Monitors likelihood of relapse for patients in remission.



Mood

Tracks general mood to help providers titrate medications.



Opioid Management

Monitors pain level via PDI survey and tracks med consumption.



Basic Needs/SDoH

Tracks patients' maintenance of basic needs.



GAD-7 (Anxiety)

Monitors anxiety symptoms using the GAD-7 scale.

Maternity Programs



Post Partum Depression

Series of 10 questions based on the Edinburgh Postnatal Depression Scale.



Breastmilk

Tracks breastmilk production and provides breastfeeding/pumping reminders.

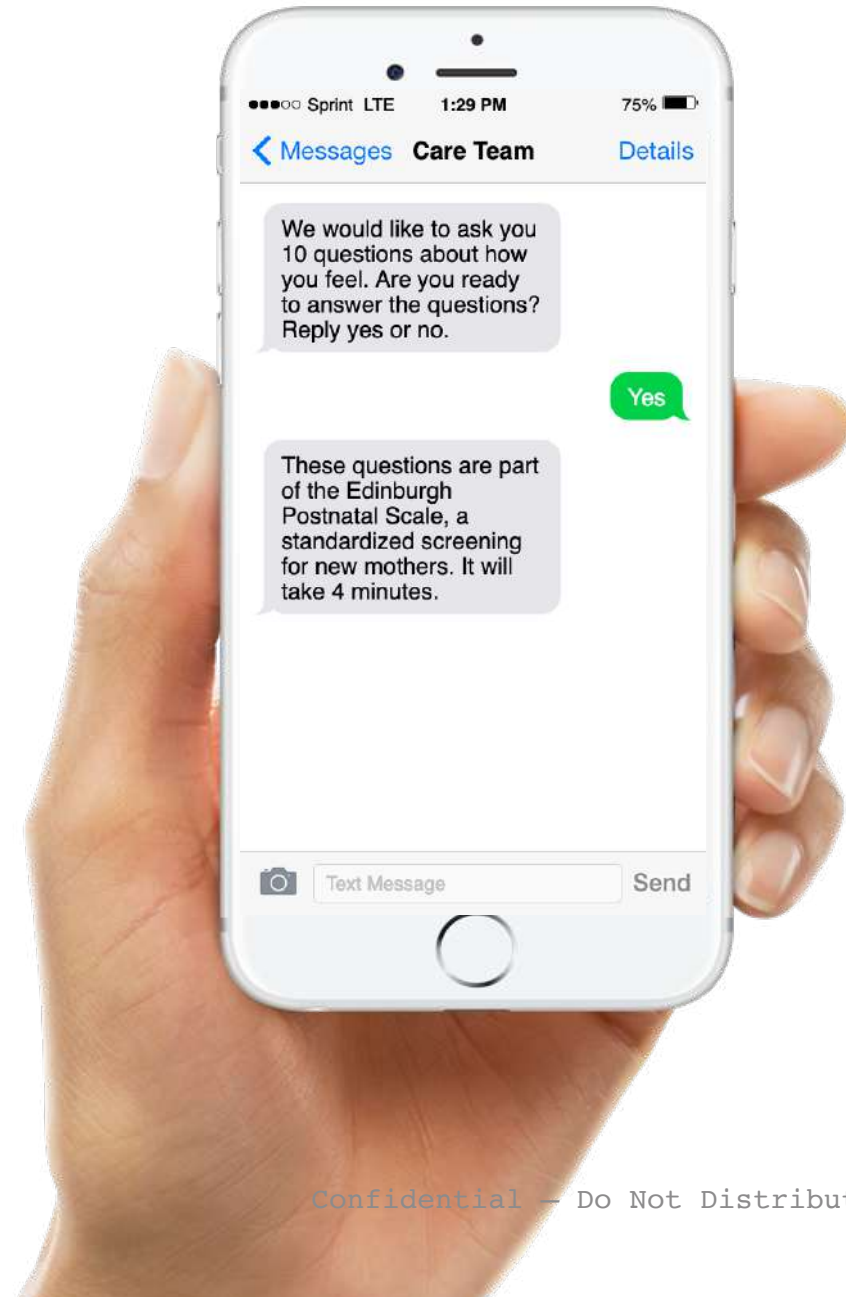


Breastfeeding

Tracks breastfeeding habits and provides feedback and education.



CareSignal™



Complementary Support Programs



Fall Risk

Monitors patient's fall risk.



Medication Adherence

Tracks reasons for missing prescription refills.



Wellness

Reinforces healthy diet and exercise habits.



Medication Companion

Tracks reasons for missing medications and prescription refills.



Medication Tracking

Provides reminders and tracks reasons for missing medications.



Vital Signs

Collects temperature, blood pressure, heart and additional vitals.



Visit try.caresignal.health



Chloe
Depression

Start Journey



Sharon
Heart Failure

Start Journey



Antonio
Diabetes

Start Journey



Adam
Asthma

Start Journey



CareSignal[®]

Deviceless Remote Patient Monitoring

Thank You!

NeuGen Case Study

The Next Generation in Healthcare
Formerly WEA Trust

Industry-Leading Engagement

75%

of members engage with
and respond to CareSignal
for at least 6 months



CareSignal™

Depression

2 in 3

members reported
improved mental
health

Hypertension

10.52_{mmHg}

average drop in sBP for
members with baseline
140-160 mmHg sBP

COPD

100%

of respondents reported
improved communication
with WEA Trust

“A key advantage of the WEA Trust is that they understand the needs of the members and the culture of our employees better than any other insurer. In trying to develop a strategic plan to offer excellent benefits but also hold the line on costs, I believe WEA is an ideal partner to help design a strategy that will be effective in ensuring high levels of employee engagement.”

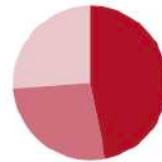
John Stellmacher

CFO, School District of Hartford Jt. #1

Case Study

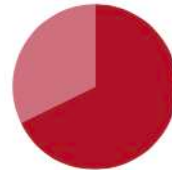
“I like knowing that I have support when I feel my lowest. I love this service! It helps me keep track of my moods and to better communicate between my doctor and me.”

“This [program] has helped me remember to think about what I do to stay healthy and keep working and going.”



Generation

47% GenX
27% Baby Boomers
26% Other



Job Type

68% Manufacturing
32% Administration



Medication Adherence

>10% increase in self-reported adherence, from 70% to >80%.
Refill data (MPR) averaged 86.5%.



Diabetes

13.7% average reduction in blood sugar in 19 weeks.



Hypertension

50% improvement in blood pressure control over 4 months.



Depression

28% average reduction in PHQ-9 scores in 11 months.

Remote Monitoring: Detailed Comparison

	Classic Remote Patient Monitoring	Deviceless Remote Patient Monitoring™	Patient Engagement Campaigns
Patient Population	✗ High-Risk	✓ Rising-Risk	● Low-Risk
Clinical Impact	✓ High	✓ High	✗ Low
Price Per Patient	✗ High	✓ Low	✓ Low
Financial Opportunity	✗ Low	✓ High	✗ Low
Legend: Impact on ROI	✓ = Good	● = Neutral	✗ = Bad

Remote Monitoring: Detailed Comparison

Classic RPM	Deviceless RPM™	Patient Engagement
<ul style="list-style-type: none">• \$100 Per Active Patient Per Month• Only feasible when billed• Requires patient implementation and training• Clinicians become tech support for patients• Appropriate for highest-morbidity populations	<ul style="list-style-type: none">• Clinically actionable insights, keeping team top-of-license• Ready to scale immediately, with no patient-facing implementation or training• Proven ROI for patients, including > 20 chronic & behavioral conditions	<ul style="list-style-type: none">• ≤\$1 Per Active Patient Per Month• Highly automated, limited clinical value• Best used for relationship management and transactional interactions• Often customizable platforms with no content, clinical logic, SOPs or evidence of efficacy

Large Payer-Provider Joint Venture

Frequency Explained · Help us improve the message frequency. Why did you rate the message frequency as __?

Average = 1.86



1 - Too Few

5 - Perfect

Too Many - 9

Message Frequency

Message Frequency · Messages from _____ are sent at just the right frequency.

Average = 4.93



1 - Strongly Disagree

Strongly Agree - 9

CareSignal Operational Excellence

Proven Enrollment, Engagement, Outcomes, and Scale

10+ Publications
in Peer-Reviewed Medical Journals

Enrollment

1 in 4

Eligible patients enroll



62% decrease
in hospitalizations
for patients with COPD



28% drop in PHQ-9
for patients with
depression

Engagement

1 in 2

Patients stay engaged for >12 months



1.15% drop in HbA1c
over 4 months



>2.1x increase in
follow-up appointment
adherence

Scale

1,500+

Patients managed per care manager



50% improvement in
blood pressure
control over 12 weeks



46% decrease in CHF
ED visits

Partnership Testimonials

Patients

*"The easy way to report the information without having to login in a computer. I get so busy at work I tend to forget to do it. **This way is so easy.**"*

"I feel safe because I feel that my doctor is next to me even thou I am 2 hrs away from him. Different city."

*"It reminds me to test my sugars and to take my insulin. Helps keep me accountable. When my sugars spiked an actual person called to give me support. **This may have saved my life.**"*

"Mostly I like keeping in contact with the Healthcare team without leaving home. I feel that I am protecting my health better by remaining in and not taking chances with the public. I appreciate that my health concerns are being addressed in the safest way possible."



Executives & Clinicians

*"The entire team was wonderful. **The most organized roll out of a project with an outside company** I have been involved with. Refreshing!"*

Chief Informatics Officer, Physician Group

*"It's a great benefit to have a **program that will assist patients**, especially patients who may not have family or friends who can check up on them on a regular basis".*

Care Manager, ACO

*"Epharmix has **improved the ability for our providers and care management staff to connect with our chronic disease patients.** It should help our patients achieve and maintain their treatment goals and allow us to identify patients needing an acute intervention to prevent ER and hospital visits."*

Medical Director, Top 5 Large Health System

*"We had never had such a **positive and supportive implementation partnership in such a short turnaround.** Everyone was respectful yet accountable and ensured success at every phase. Bravo!"*

Chief Clinical Officer, BH Network

Enrollment Performance

Physician Group Case Study



Timeline: less than 4 months

Recent Campaigns

	COPD 8,468 calls	CHF 8,216 calls
Outbound calls		
Success	91%	92%
Pick-up	50%	50%
Connection	87%	83%
Decision	71%	70%
Accept	71%	69%
Total per call conversion	19.6%	18.6%
Avg calls per patient ~2.1		

Beyond Technology: Supportive Services to Ensure Success

"The entire team was wonderful. The most organized roll out of a project with an outside company I have been involved with. Refreshing!"

Chief Informatics Officer, Physician Group

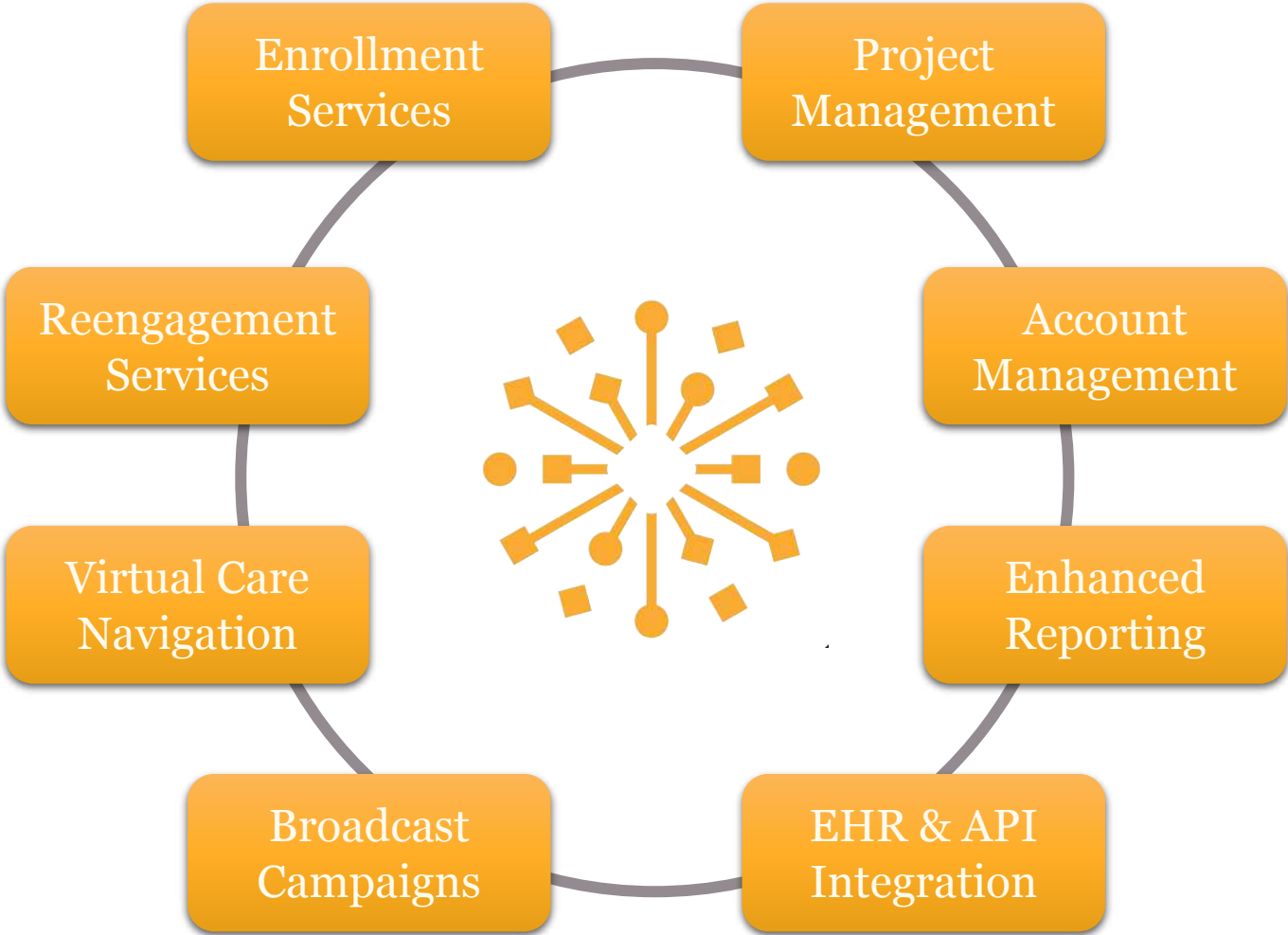
"We had never had such a positive and supportive implementation partnership in such a short turnaround. Everyone was respectful yet accountable and ensured success at every phase. Bravo!"

Chief Clinical Officer, BH Network



Patient
Services

Partner
Services

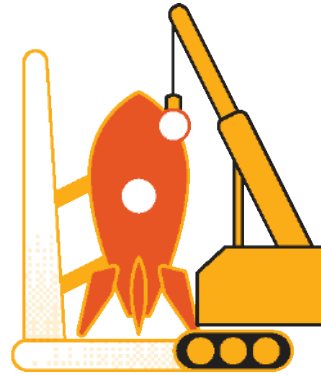


Going Beyond Technology: Partnership Support



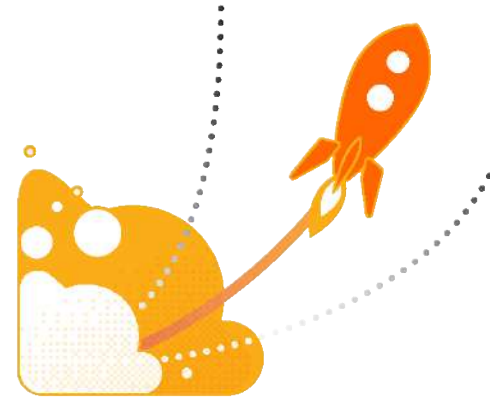
Kick-off

- Meet CareSignal team!
- Establish program goals
- Review project plan



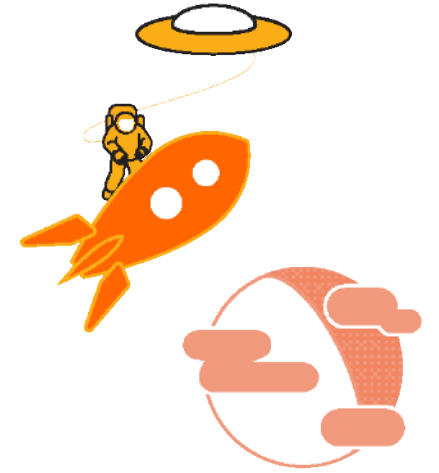
Onboarding

- Enrollment
- Operational workflows
- Clinical SOP's
- Training & Education



Ramp-up

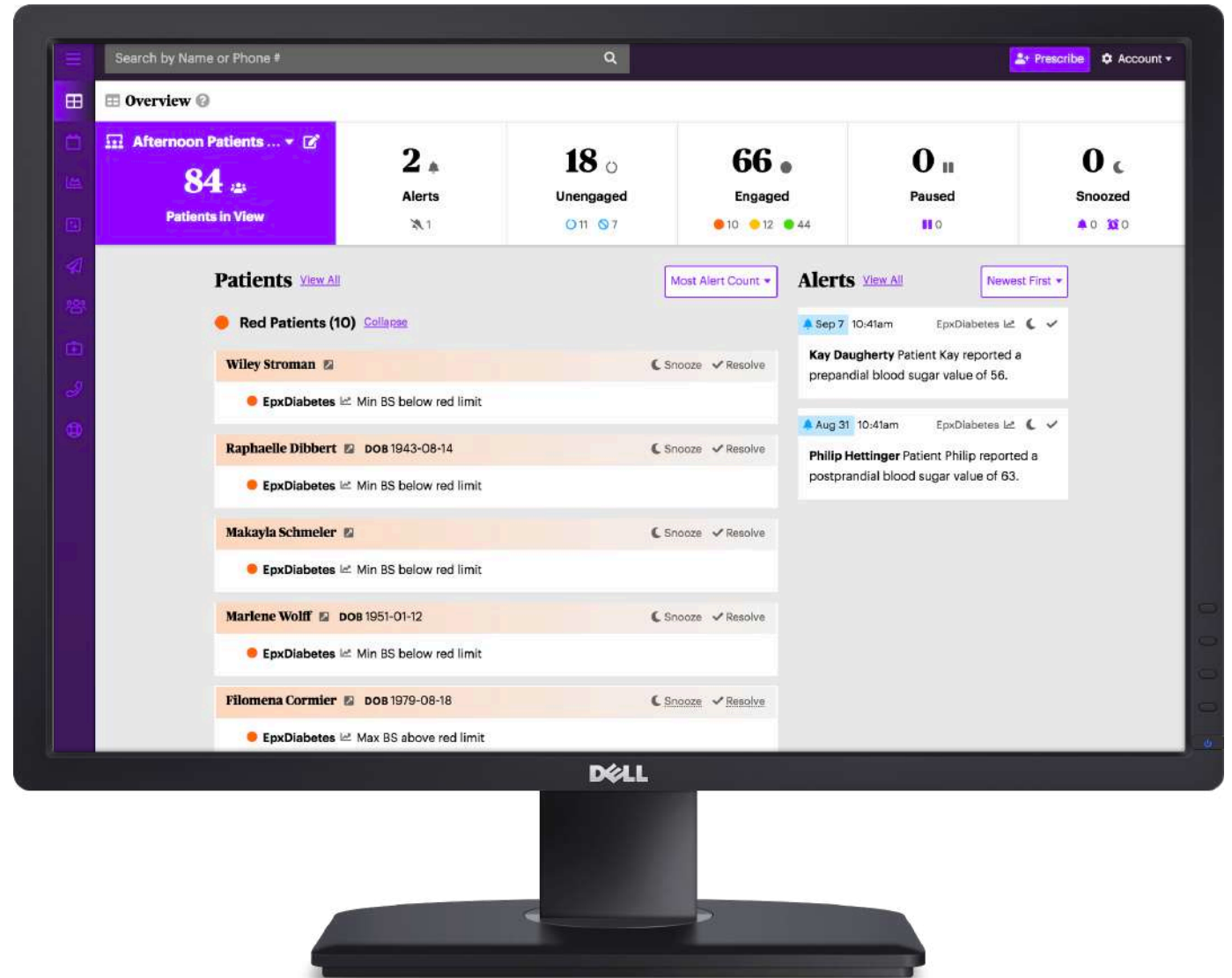
- Patient Engagement Specialist increasing enrollment to target
- Check-ins every two weeks to streamline workflows



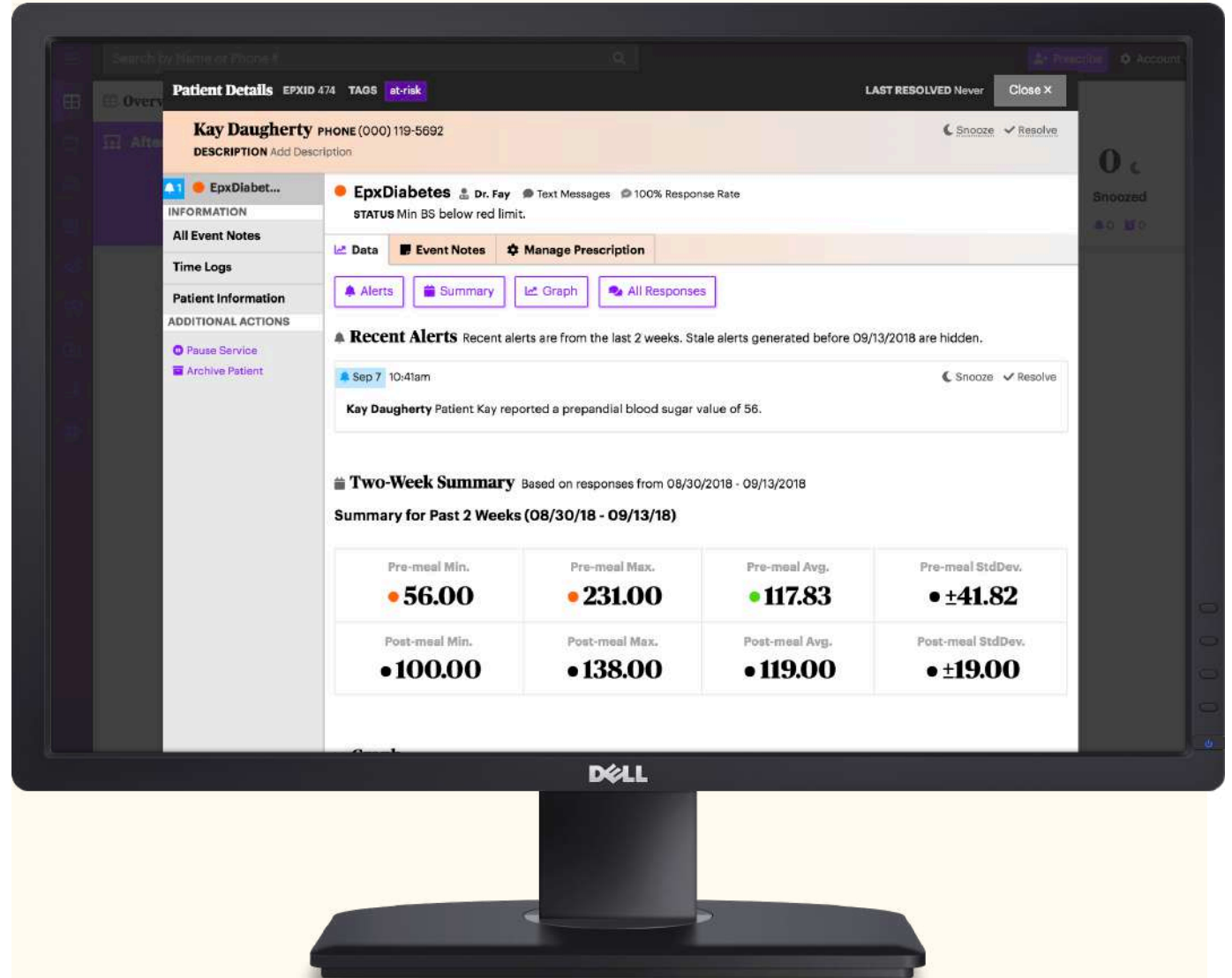
Ongoing Support

- Monthly utilization reviews
- Quarterly outcome reviews
- Accessible technical support
- Claims reporting available

Dashboard



Dashboard



COVID Suite Programs

For All Patients
and Communities



Share up-to-date CDC tips and local public health contact information at scale. Any patient or community member, regardless of infection status or provider affiliation, can use COVID Companion immediately.

For Patients
Under Home-Quarantine



Help patients in home quarantine self-monitor their key signs and symptoms, and enable automatic connection to your organization's existing COVID-19 hotline if any signs or symptoms worsen. Patients feel supported and informed, and you know they can reach out through the appropriate channel if necessary.

For Frontline
or Clinical Staff



Provide proactive support for frontline and clinical teammates. This program sends simple daily health check-ins to monitor for any COVID-19 symptoms, and includes optional modules to track employee stress and any issues accessing PPE.

Try COVID
Companion now

Text HEALTH
to 67634